(ii) at least one thickening polymer;

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \bigvee_{R_3}^{R_3'} - N \bigvee_{R_2}^{R_1} \qquad (I)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

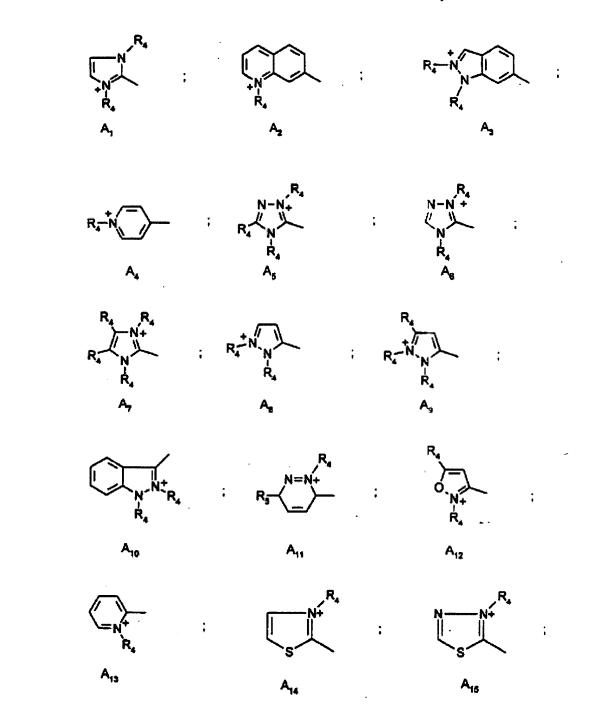
 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

 $R_1$  and  $R_2$  may form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:



$$\begin{array}{c}
R_4 \\
N+\\
N-\\
S
\end{array}$$

$$\begin{array}{c}
R_4 \\
N+\\
N-\\
N-\\
N+\\
R_4
\end{array}$$

$$\begin{array}{c}
R_4 \\
R_4
\end{array}$$

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1$ - $C_4$  alkoxy radicals, and wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

**(b)** wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N-R_{s}$$

$$X \cdot R_{s}$$

$$R_{7}$$

$$R_{7}$$

$$R_{7}$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

(111)

and

**B**6

in which:

 $R_{10}$  is chosen from  $C_1\text{-}C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X^{-}$$

$$R_{15}$$

$$R_{17}$$

$$R_{17}$$

in which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1\text{-}C_4$  alkoxy radicals, halogen atoms and an amino radical,

R<sub>14</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and E7

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

and

- (d) wherein said at least one thickening polymer is chosen from:
- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses, with the provisos that
- (1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:
  - both D's are simultaneously nitrogen atoms,
  - R<sub>3</sub> and R'<sub>3</sub> are simultaneously hydrogen atoms,
  - R<sub>1</sub> and R<sub>2</sub> are simultaneously unsubstituted methyl radicals, and
  - A is  $A_6$  wherein  $R_4$  is an unsubstituted methyl radical, or
  - (2) when said at least one cationic direct dye is chosen from compounds



of formula (III) wherein:

- D<sub>1</sub> and D<sub>2</sub> are simultaneously nitrogen atoms,
- m is zero,
- R<sub>15</sub> is a hydrogen atom,
- R<sub>13</sub> is a dimethylamino radical, and
- E is E<sub>8</sub> wherein R' is an unsubstituted methyl group,

then the at least one thickening polymer is not chosen from at least one nonionic guar gum; and

with the further provisos that

- (1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:
  - both D's are simultaneously nitrogen atoms, and
  - A is chosen from A<sub>4</sub> and A<sub>13</sub>, or
- (2) when said at least one cationic direct dye is chosen from compounds of formula (III) wherein:
  - D<sub>1</sub> and D<sub>2</sub> are simultaneously nitrogen atoms,
  - m is zero, and
  - E is chosen from E<sub>1</sub>, E<sub>2</sub>, and E<sub>7</sub>,

then said at least one thickening polymer is not chosen from hydroxyalkylcelluloses and carboxyalkylcelluloses.

45. (Amended Three Times) A process for dyeing keratin fibers, comprising applying at least one dye composition to said keratin fibers and

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developing for a period of time sufficient to achieve a desired coloration, wherein said at least one dye composition comprises:

- (i) at least one cationic direct dye chosen from compounds of formulae (I),(II), (III) and (III') below, and
  - (ii) at least one thickening polymer;
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A-D=D-\bigvee_{R_3}^{R_3'}N_{R_2}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

## X is chosen from anions,

## A is chosen from structures $A_1$ to $A_{19}$ below:

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

R<sub>5</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

**(b)** wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N$$

$$X$$

$$R_{9}$$

$$R_{7}$$

$$R_{7}$$

$$R_{9}$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R_{15}$ 

and

R<sub>10</sub>

**B6** 

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1} = D_{2} - (N)_{m} - R_{13}$$

$$X - R_{15} - R_{15} - R_{15} - R_{16} - R_{16$$

in which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one to radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

and

- (d) wherein said at least one thickening polymer is chosen from:
- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- $(ii)_7$  hydroxyalkylcelluloses and carboxyalkylcelluloses, with the provisos that
- (1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:
  - both D's are simultaneously nitrogen atoms,
  - R<sub>3</sub> and R'<sub>3</sub> are simultaneously hydrogen atoms,
  - R<sub>1</sub> and R<sub>2</sub> are simultaneously unsubstituted methyl radicals, and

- A is A<sub>6</sub> wherein R<sub>4</sub> is an unsubstituted methyl radical, or

(2) when said at least one cationic direct dye is chosen from compounds of formula (III) wherein:

- D<sub>1</sub> and D<sub>2</sub> are simultaneously nitrogen atoms,
- m is zero,
- R<sub>15</sub> is a hydrogen atom,
- R<sub>13</sub> is a dimethylamino radical, and
- E is E<sub>8</sub> wherein R' is an unsubstituted methyl group,

then the at least one thickening polymer is not chosen from at least one nonionic guar gum; and

with the further provisos that

(1) when said at least one cationic direct dye is chosen from compounds of formula (I) wherein:

- both D's are simultaneously nitrogen atoms, and
- A is chosen from A<sub>4</sub> and A<sub>13</sub>, or
- (2) when said at least one cationic direct dye is chosen from compounds of formula (III) wherein:
  - D<sub>1</sub> and D<sub>2</sub> are simultaneously nitrogen atoms,
  - m is zero, and
  - E is chosen from E<sub>1</sub>, E<sub>2</sub>, and E<sub>7</sub>,

then said at least one thickening polymer is not chosen from hydroxyalkylcelluloses and carboxyalkylcelluloses.

48. 48 (Amended Twice) A process for dyeing keratin fibers, comprising separately storing a first composition,

separately storing a second composition,

thereafter mixing said first and second compositions,

applying said mixture to said fibers, and

developing for a period of time sufficient to achieve a desired coloration,

- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below, at least one thickening polymer and at least one oxidation base,
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

03

$$A - D = D - N R_1$$

$$X \cdot R_3 \qquad (I)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

R<sub>1</sub> and R<sub>2</sub> form, with each other or with a carbon atom of the benzene ring of

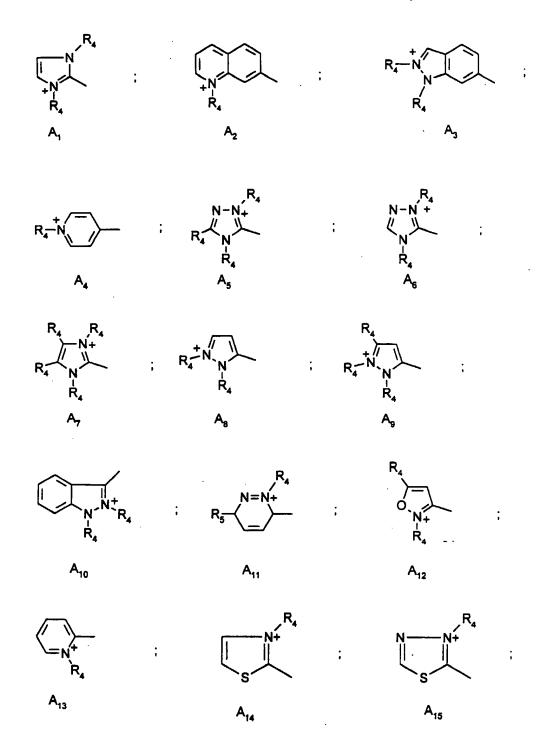
formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:





()3

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\text{-}C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N$$

$$R_{9}$$

$$R_{7}$$

$$R_{7}$$

$$R_{9}$$

$$R_{7}$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1\text{-}C_4$  alkyl radicals  $C_1\text{-}C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:



$$R_{10}$$
  $R_{10}$   $R_{10}$   $R_{10}$   $R_{10}$   $R_{11}$   $R_{12}$   $R_{12}$   $R_{13}$   $R_{12}$   $R_{13}$   $R_{14}$   $R_{15}$   $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X = R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$R_{16}$$

$$R_{16}$$

$$R_{16}$$

$$R_{17}$$

$$R_{16}$$

$$R_{17}$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

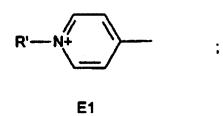
m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:







and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- and wherein said at least one thickening polymer is chosen from:
- (ii)<sub>1</sub> nonionic guar gums;
- (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
- (ii)<sub>3</sub> gums derived from plant exudates;
- (ii)<sub>4</sub> pectins;
- (ii)<sub>5</sub> alginates;
- (ii)<sub>6</sub> starches; and
- (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.

(Amended Twice) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition,

thereafter mixing said first and second compositions,

applying said mixture to said fibers, and



developing for a period of time sufficient to achieve a desired coloration,

- wherein said first composition comprises at least one oxidation base, and at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - N R_1$$

$$X \cdot R_3 \qquad (I)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

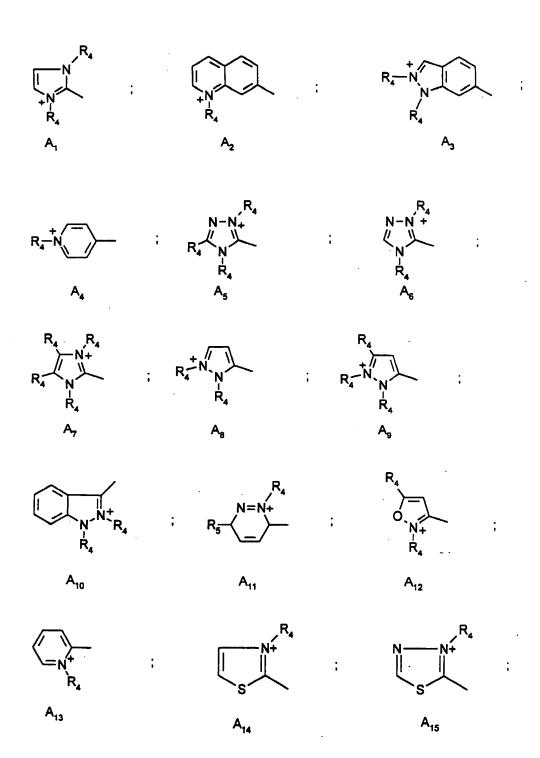
 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,



X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:



and

in which:

 $R_4$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\text{-}C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ \end{array}$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:



$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

in which:

 $R_{10}$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:



$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$
(III)
$$R_{16}$$

$$R_{17}$$

$$R_{16}$$

$$R_{17}$$

$$R_{16}$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

 $\ensuremath{R_{15}}$  is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

03

and

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

and

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,
- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - $(ii)_4$  pectins;
  - (ii)<sub>5</sub> alginates;
  - (ii)<sub>6</sub> starches; and
  - (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses.

50. (Amended Twice) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition,



thereafter mixing said first and second compositions,

- applying said mixture to said fibers, and
- developing for a period of time sufficient to achieve a desired coloration,
- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below and at least one thickening polymer:
- (a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A \longrightarrow D \longrightarrow D \longrightarrow R_3$$

$$X \longrightarrow R_2$$

$$R_2$$

$$(1)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

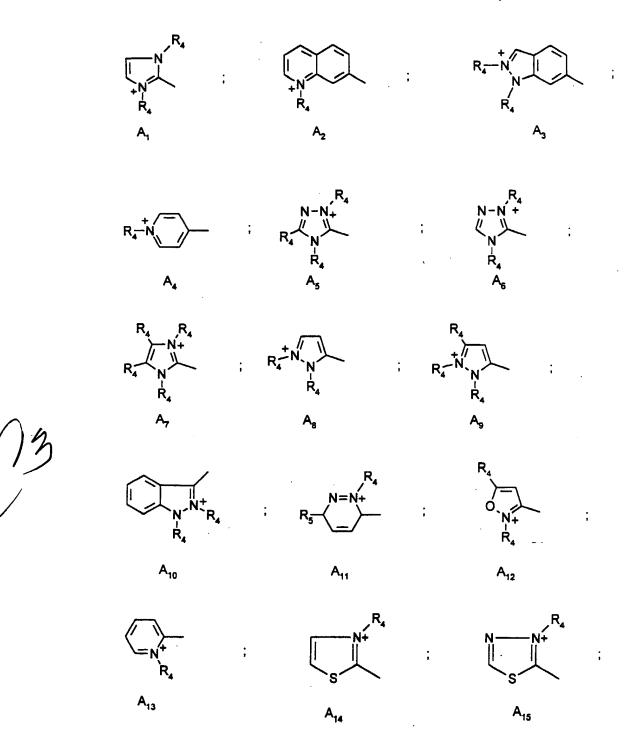
R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub>



alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:



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and

in which:

 $R_4$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\text{-}C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ \end{array}$$

$$R_7$$

$$(II)$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures  $B_1$  to  $B_6$  below:



$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X^{-}$$

$$R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$(III)$$

$$(III')$$

in which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures E<sub>1</sub> to E<sub>8</sub> below:



and

in which R' is chosen from  $C_1\text{-}C_4$  alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - $(ii)_4$  pectins;
  - (ii)<sub>5</sub> alginates;
  - (ii)<sub>6</sub> starches; and
  - (ii)7 hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.

51. (Amended Twice) A process for dyeing keratin fibers, comprising separately storing a first composition, separately storing a second composition, thereafter mixing said first and second compositions, applying said mixture to said fibers, and



developing for a period of time sufficient to achieve a desired coloration, wherein said first composition comprises at least one cationic direct dye

chosen from compounds of formulae (I), (II), (III) and (III') below:

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A \longrightarrow D \longrightarrow D \longrightarrow R_3 \qquad (I)$$

$$X \longrightarrow R_3 \qquad .$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,



## A is chosen from structures $A_1$ to $A_{19}$ below:

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and

in which:

 $R_4$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\text{-}C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$R_{g}$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:

03

$$R_{10}$$
  $R_{10}$   $R_{10}$   $R_{10}$   $R_{10}$   $R_{10}$   $R_{11}$   $R_{12}$   $R_{12}$   $R_{12}$   $R_{13}$   $R_{14}$   $R_{15}$   $R$ 

(13)

in which:

 $R_{10}$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X^{-}$$

$$R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$(III')$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

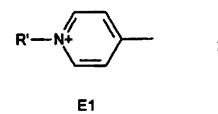
m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:





and

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,
- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - (ii)<sub>4</sub> pectins;
  - (ii)<sub>5</sub> alginates;
  - (ii)<sub>6</sub> starches; and
  - (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses.
- (Amended Once) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,
- wherein said first composition comprises at least one cationic direct dye

chosen from compounds of formulae (I), (II), (III) and (III') below, at least one thickening polymer and at least one oxidation base:

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - N R_1$$

$$X \cdot R_3$$

$$R_2$$
(I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

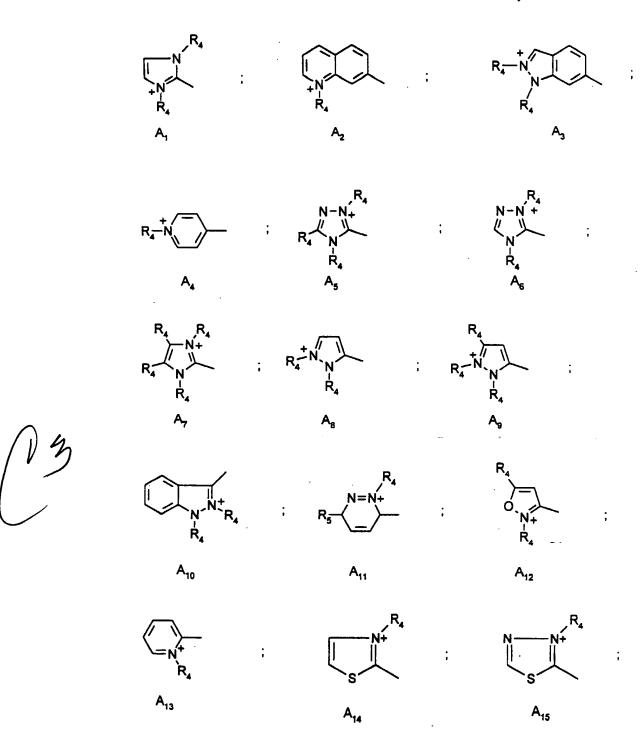
 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

03



(13

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\hbox{-} C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \\ \end{array}$$

$$R_7$$

$$R_7$$

$$R_7$$

$$R_7$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1\text{-}C_4$  alkyl radicals  $C_1\text{-}C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:



$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

13

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X = R_{15}$$

$$R_{15}$$

$$R_{16}$$
(III)
$$R_{16}$$

$$R_{16}$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

 $\ensuremath{R_{15}}$  is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:



and

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - $(ii)_4$  pectins;
  - (ii) $_5$  alginates;
  - (ii)<sub>6</sub> starches; and
  - (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.

(Amended Once) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,

- wherein said first composition comprises at least one oxidation base and at least one cationic direct dye chosen from compounds of formulae (I), (II), (III)



and (III') below:

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - N R_1$$

$$X \cdot R_3 \qquad (I)$$

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

 $R_3$  and  $R_3$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical,  $C_1$ - $C_4$  alkyl radicals,  $C_1$ - $C_4$  alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:

03

	A,	H <sub>N</sub> R <sub>4</sub>	R <sub>4</sub> -N <sub>N</sub> -N <sub>N</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub> -N <sub>A</sub>
	R <sub>4</sub> -N	N-N+ R <sub>4</sub> N R <sub>4</sub> A <sub>5</sub>	N-N+ // N-N+ // R <sub>4</sub> A <sub>6</sub>
03	$ \begin{array}{cccc} R_4 & R_4 \\ \hline R_4 & N + \\ R_4 & R_4 \end{array} $ $ \begin{array}{cccc} R_4 & R_4 &$	A <sub>8</sub>	R <sub>4</sub> +// N N R <sub>4</sub> A <sub>9</sub>
	N, N+ R <sub>4</sub> ;	$R_{5} \xrightarrow{N=N+} A_{11}$	R <sub>4</sub> O N+ R <sub>4</sub> A <sub>12</sub>
	=N+ R <sub>4</sub>	S R <sub>4</sub>	N N R <sub>4</sub>

03

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\hbox{-} C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \end{array} \begin{array}{c} R_7 \\ \hline \\ R_7 \end{array} \tag{II)}$$

in which:

R<sub>6</sub> is chosen from a hydrogen atom and C<sub>1</sub>-C<sub>4</sub> alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:



03

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$R_{16}$$

$$R_{17}$$

$$R_{16}$$

$$R_{16}$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

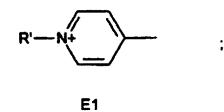
m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:





and

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,
- wherein said at least one thickening polymer is chosen from:
  - (ii)₁ nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - (ii)<sub>4</sub> pectins;
  - (ii)<sub>5</sub> alginates;
  - (ii)<sub>6</sub> starches; and
  - (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses.
- 51 (Amended Once) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,
- wherein said first composition comprises at least one thickening polymer



and at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:

(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - \begin{cases} R'_3 \\ N \\ R_2 \end{cases}$$
 (I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

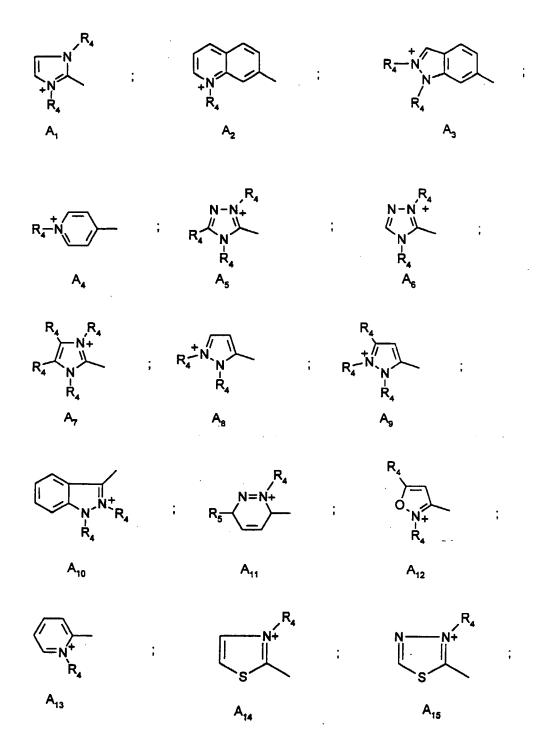
 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures  $A_1$  to  $A_{19}$  below:





and

in which:

 $R_4$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_5$  is chosen from  $C_1\text{-}C_4$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$R_{8}$$

$$X \cdot R_{9}$$

$$R_{7}$$

$$R_{7}$$

$$R_{7}$$

$$R_{7}$$

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1$ - $C_4$  alkyl radicals  $C_1$ - $C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:

03

$$R_{10}$$
  $R_{10}$   $R_{10}$   $R_{10}$   $R_{10}$   $R_{10}$   $R_{11}$   $R_{12}$   $R_{12}$   $R_{12}$   $R_{13}$   $R_{14}$   $R_{15}$   $R$ 

03

in which:

 $R_{10}$  is chosen from  $C_1\hbox{-} C_4$  alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_{1}$ - $C_{4}$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of

formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X^{-}$$

$$R_{15}$$

$$R_{15}$$

$$R_{16}$$

$$(III)$$

$$(III')$$

in which:

R<sub>13</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

 $R_{15}$  is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

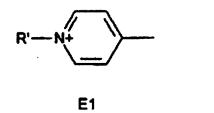
m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:





and

wherein when m is 0 and when D<sub>1</sub> represents a nitrogen atom, E can be further chosen from structure E9 below:

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - $(ii)_4$  pectins;
  - (ii)<sub>5</sub> alginates;
  - (ii)<sub>6</sub> starches; and
  - (ii)7 hydroxyalkylcelluloses and carboxyalkylcelluloses; and
- wherein said second composition comprises at least one oxidizing agent.

(Amended Once) A multi-compartment dyeing kit, comprising at least two separate compartments, wherein a first compartment contains a first composition and a second compartment contains a second composition,

- wherein said first composition comprises at least one cationic direct dye chosen from compounds of formulae (I), (II), (III) and (III') below:



(a) wherein said compounds of formula (I) are chosen from compounds of formula:

$$A - D = D - N R_1$$

$$X \cdot R_3$$

$$R_2$$
(I)

in which:

D is chosen from a nitrogen atom and a -CH group,

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from a hydrogen atom; a 4'-aminophenyl radical; and  $C_1$ - $C_4$  alkyl radicals which can optionally be substituted with a radical chosen from -CN, -OH and -NH $_2$  radicals; or

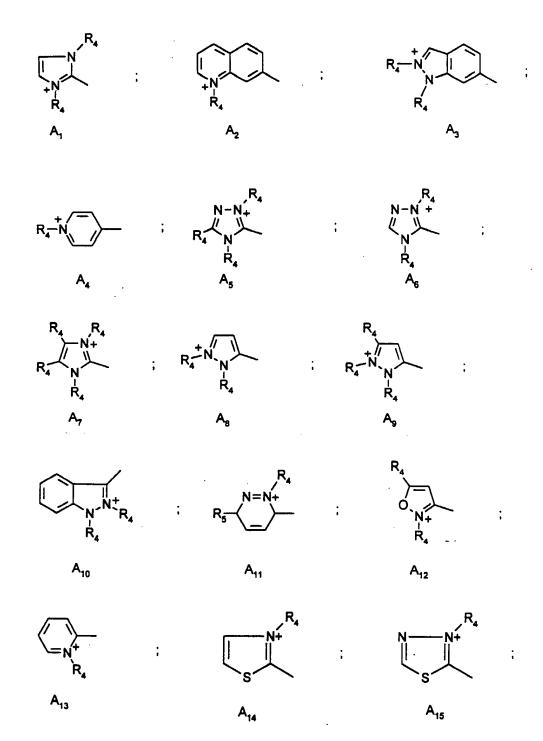
 $R_1$  and  $R_2$  form, with each other or with a carbon atom of the benzene ring of formula (I), a heterocycle optionally containing a heteroatom chosen from oxygen and nitrogen, which can be substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals;

R<sub>3</sub> and R'<sub>3</sub>, which may be identical or different, are chosen from a hydrogen atom, halogen atoms, a cyano radical, C<sub>1</sub>-C<sub>4</sub> alkyl radicals, C<sub>1</sub>-C<sub>4</sub> alkoxy radicals and acetyloxy radicals,

X is chosen from anions,

A is chosen from structures A<sub>1</sub> to A<sub>19</sub> below:





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13

and

in which:

 $R_4$  is chosen from  $C_1\text{-}C_4$  alkyl radicals which can be substituted with a hydroxyl radical, and

 $R_{5}$  is chosen from  $C_{1}\text{-}C_{4}$  alkoxy radicals, and

wherein when D represents -CH, when A represents  $A_4$  or  $A_{13}$  and when  $R_3$  is not an alkoxy radical,  $R_1$  and  $R_2$  are not both a hydrogen atom;

(b) wherein said compounds of formula (II) are chosen from compounds of formula:

$$B-N=N- \begin{array}{c} R_8 \\ \hline \\ X \end{array} \begin{array}{c} R_7 \\ \hline \\ R_7 \end{array}$$
 (II)

in which:

 $R_6$  is chosen from a hydrogen atom and  $C_1$ - $C_4$  alkyl radicals,

 $R_7$  is chosen from a hydrogen atom, alkyl radicals which can be substituted with a species chosen from a -CN radical and an amino group, and a 4'-aminophenyl radical, or forms, with  $R_6$ , a heterocycle optionally comprising at least one heteroatom chosen from oxygen and nitrogen, which can be substituted with  $C_1$ - $C_4$  alkyl radicals,

 $R_8$  and  $R_9$ , which may be identical or different, are chosen from a hydrogen atom, halogen atoms,  $C_1\text{-}C_4$  alkyl radicals  $C_1\text{-}C_4$  alkoxy radicals and a -CN radical,

X is chosen from anions,

B is chosen from structures B<sub>1</sub> to B<sub>6</sub> below:

03

$$R_{10}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

03

in which:

R<sub>10</sub> is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, and

 $R_{11}$  and  $R_{12}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals;

(c) wherein said compounds of formulae (III) and (III') are chosen from compounds of

formulae:

$$E-D_{1}=D_{2}-(N)_{m}$$

$$X \cdot R_{15}$$

$$R_{15}$$

$$R_{16}$$
(III)
$$R_{16}$$
(IIII)

in which:

 $R_{13}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkoxy radicals, halogen atoms and an amino radical,

 $R_{14}$  is chosen from a hydrogen atom,  $C_1$ - $C_4$  alkyl radicals or forms, with a carbon atom of the benzene ring, a heterocycle optionally containing an oxygen heteroatom and/or substituted with at least one radical chosen from  $C_1$ - $C_4$  alkyl radicals,

R<sub>15</sub> is chosen from a hydrogen atom and halogen atoms,

 $R_{16}$  and  $R_{17}$ , which may be identical or different, are chosen from a hydrogen atom and  $C_1\text{-}C_4$  alkyl radicals,



 $D_1$  and  $D_2$ , which may be identical or different, are chosen from a nitrogen atom and a -CH group,

m is 0 or 1,

wherein when  $R_{13}$  is an unsubstituted amino group,  $D_1$  and  $D_2$  are both a -CH group and m is 0,

X is chosen from anions,

E is chosen from structures  $E_1$  to  $E_8$  below:

and

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

wherein when m is 0 and when  $D_1$  represents a nitrogen atom, E can be further chosen from structure E9 below:

N3

in which R' is chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals;

- wherein said second composition comprises at least one oxidizing agent and at least one thickening polymer,
- wherein said at least one thickening polymer is chosen from:
  - (ii)<sub>1</sub> nonionic guar gums;
  - (ii)<sub>2</sub> biopolysaccharide gums of microbial origin;
  - (ii)<sub>3</sub> gums derived from plant exudates;
  - (ii)<sub>4</sub> pectins;
  - (ii)<sub>5</sub> alginates;



- (ii)<sub>6</sub> starches; and
- (ii)<sub>7</sub> hydroxyalkylcelluloses and carboxyalkylcelluloses.

In accordance with the requirements of 37 C.F.R. § 1.121, the attached Appendix shows the changes to the claims that have been made by the amendment.

## **REMARKS**

## I. Status of the Claims

Claims 1-6, and 8-55 are now pending in this application. Claim 7 has been cancelled and its subject matter incorporated into each of claims 1, 45, 48, 49, 50, 51, 52, 53, 54, and 55 in light of the Office's suggestions in a telephone conference with Applicant's attorney on June 5, 2002. This proposed amendment does not constitute new matter, or raise any new issues for search, as support for the proposed amendments is found in claim 7 as-filed. Accordingly, the above proposed amendment should place the claims in condition for allowance, or at least reduce the number of issues for appeal. Thereby, Applicant respectfully requests entry of the above amendment, reconsideration and reexamination of the application, and timely allowance of the pending claims.

## II. <u>Double Patenting Rejections</u>

Claims 1-17 and 21-25 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-46 of copending Application No. 09/349,436.